IN THE CLAIMS

Please cancel claims 15-21, amend claims 1 and 3-14, and add new claims 22-28, in accordance with the following listing showing the status of all claims in the application.

1. (Currently Amended) A method of making a sample vessel comprising:

a) melting a plastics material;

b) introducing the molten plastics material into a mold[[,]]; and

c) allowing the plastics material to set in the mold

wherein the mold defines a cavity with the shape of a sample vessel which comprises a tubular portion, which tubular portion has a maximum external cross sectional width of ~~up to~~ 5 millimeters (mm) and an internal sample volume of ~~up to~~ not more than 100 microliters (μl), wherein the tubular portion comprises a tubular external wall with a thickness of from 0.01 to 2mm.

2. (Original) A method as claimed in claim 1 wherein the tubular external wall has a thickness in the range of from 0.1mm to 0.5mm.

3. (Currently Amended) A method as claimed in claim 1 ~~or claim 2~~ in which the molten plastics material is introduced into the mold by injection.

4. (Currently Amended) A method as claimed in ~~any one of claims 1 to 3~~ claim 1 in which the tubular portion

- has a truncated conical external surface, the angle between a meridian of the truncated conical external surface and the axis of the cone being in the range of from 0.1 degrees to 10 degrees,

- is closed at its narrower end, and

- is open at its wider end.

5. (Currently Amended) A method as claimed in ~~any one of claims~~ claim 1 ~~to 4~~ in which the tubular portion has ~~a maximum~~ an external cross sectional width of less than 3mm.

6. (Currently Amended) A method as claimed in ~~any one of claims 2 to 5~~ claim 1 in which the mean internal cross sectional width of the cavity of the tubular portion is in the range of from 0.02mm to 4.9mm.

7. (Currently Amended) A method as claimed in ~~any one of claims~~ claim 1 ~~to 6~~ in which the sample tube further comprises a section of frustoconical shape directly or indirectly adjoining the tubular portion, which section increases in external ~~and optionally also internal~~ diameter in the direction away from the tubular portion.

8. (Currently Amended) A method as claimed in ~~any one of claims 1 to 7~~ claim 1 in which the sample tube further comprises a neck portion comprising a cylindrical portion for receiving a closure means.

9. (Currently Amended) A method as claimed in ~~any one of claims 1 to 8~~ claim 1 in which the mold comprises a highly polished portion at the tip of the mold.

10. (Currently Amended) A method as claimed in ~~any one of claims 1 to 9~~ claim 1 in which the plastics material is a cyclo-olefin copolymer, a cyclo-olefin polymer or polypropylene.

11. (Currently Amended) A method as claimed in ~~any one of claims~~ claim 1 ~~to 10~~ in which the plastics material is a cyclo -olefin copolymer.

12. (Currently Amended) A method as claimed in ~~any one of claims 1 to 10~~ claim 1 in which the plastics material is an amorphous cyclo-olefin polymer.

13. (Currently Amended) A method as claimed in ~~any one of claims 1 to 10~~ claim 1 in which the plastics material is polypropylene.

14. (Currently Amended) A molded plastics material sample vessel ~~which comprises~~ comprising a tubular portion which has a maximum external cross sectional width of ~~up to~~ 5 millimeters (mm) and an internal sample volume of ~~up to~~ not more than 100 microliters (µl) wherein the tubular portion comprises a tubular external wall with a thickness of from 0.01 to 2mm.

15-21 (Canceled)

22. (New) A method as claimed in claim 1 in which the plastics material is a cyclo-olefin copolymer of ethylene and norbornene.

23. (New) A molded plastics material sample vessel according to claim 14, wherein the tubular portion:

- has a truncated conical external surface, the angle between a meridian of the truncated conical external surface and the axis of the cone being in the range of from 0.1 degrees to 10 degrees,
- is closed at its narrower end, and
- is open at its wider end.

24. (New) A molded plastics material sample vessel according to claim 14, further comprising a section of frustoconical shape directly or indirectly adjoining the tubular

portion, which section increases in external diameter in the direction away from the tubular portion.

25. (New) A molded plastics material sample vessel as claimed in claim 14 further comprising a neck portion that includes a cylindrical portion for receiving a closure means.

26. (New) A method of using a sample vessel, comprising:

a) obtaining a sample vessel as recited in claim 14;

b) placing a sample into the sample vessel; and

c) at least one of heating the sample, spectrophotometrically analyzing the sample or subjecting the sample to a nucleic acid amplification reaction, while the sample is in the sample vessel.

27. (New) A method according to claim 26, wherein the sample is spectrophotometrically analyzed during the nucleic acid amplification reaction.

28. (New) A molded plastics material sample vessel which comprises a tubular portion having a maximum external cross sectional width of 3 millimeters (mm) and an internal sample volume of not more than 100 microliters (μl), wherein the tubular portion comprises a tubular external wall with a thickness in the range of from 0.1mm to 0.5mm, and wherein the tubular portion:

a) has a truncated conical external surface, the angle between a meridian of the truncated conical external surface and the axis of the cone being in the range of from 0.1 degrees to 10 degrees,

b) is closed at its narrower end, and

c) is open at its wider end, and

wherein the mean internal cross sectional width of the cavity of the tubular portion is in the range of from 0.5mm to 3mm, wherein the sample tube further comprises a section of frustoconical shape directly or indirectly adjoining the tubular portion, which section increases in external and internal diameter in the direction away from the tubular portion, and wherein the sample vessel is made of a cyclo-olefin copolymer of ethylene and norbornene.

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Respectfully submitted,

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